

THE PSOCOPTERA OF THE WALLINGTON ESTATE – A CONTRIBUTION TO RECORDING THE NORTHUMBERLAND FAUNA

KEITH N.A. ALEXANDER

National Trust, 33 Sheep Street, Cirencester, Glos GL7 1RQ
(E-mail: keithalexander@smtp.ntrust.org.uk)

KERSLAKE (1998) has identified the need for more information to be gathered on a number of groups of organisms in Northumberland. These include the Psocoptera – book lice or bark flies. Coincidentally the National Trust's Biological Survey Team spent three weeks on the Wallington Estate in Northumberland during August 1999 and a special effort was made to record the arboreal species of this very neglected group of insects. A total of seventeen species were noted – probably well over half of the native species that may be expected in the county as a whole.

Arboreal bark flies have two main habits: i) foliage species, which feed on debris and the microflora of the surface of leaves; and ii) bark frequenters which feed on algae and fungal spores. It is very much the latter group that are well represented at Wallington.

The estate is drained by a series of water courses, mostly lined by native trees and shrubs in variable densities and open to livestock grazing – effectively a wood-pasture habitat – from the Fallowlees Burn in the north to the River Wansbeck in the south. These linear wood pastures have been linked by shelterbelts established in the 18th century and which have developed locally into interesting strips of old wood-pasture type habitat in their own right. Thus there is a network of trees, including old open-grown individuals with well-lit trunks, all within the matrix of generally intensively farmed land. There appear to be only a few small relict stands of ancient woodland in the conventional sense of dense stands of trees providing heavily shaded conditions in the summer months. Air quality is good and the trees with the better-lit trunks have good cover of epiphytes – thereby providing good conditions for invertebrates of tree trunks.

The species encountered are as follows:

<i>Caecilius flavidus</i> (Stephens)	<i>Philotarsus picicornis</i> (Fabricius)
<i>Caecilius burmeisteri</i> Brauer	<i>Psococerastis gibbosa</i> (Sulzer)
<i>Graphopsocus cruciatus</i> (L.)	<i>Metylophorus nebulosus</i> (Stephens)
<i>Ectopsocus petersi</i> Smithers	<i>Trichadenotecnum fasciatum</i> (F.)
<i>Peripsocus phaeopterus</i> (Stephens)	<i>Trichadenotecnum sexpunctatum</i> (L.)
<i>Peripsocus alboguttatus</i> (Dalman)	<i>Trichadenotecnum variegatum</i> (Latreille)
<i>Elipsocus abdominalis</i> Reuter	<i>Amphigerontia contaminata</i> (Stephens)
<i>Elipsocus hyalinus</i> (Stephens)	<i>Amphigerontia bifasciata</i> (Latreille)
<i>Elipsocus pumilus</i> (Hagen)	

Some of these merit further comment:

Ectopsocus petersi

Almost certainly widely distributed and very common throughout Britain on tree foliage and in leaf litter. It was first distinguished from the equally common *E. briggisi*

McLachlan only in 1977 (Smithers, 1978) and British entomologists have been slow to distinguish the two species locally. All of the *Ectopsocus* retained for examination from Wallington are *E. petersi*:

- Catcherside Green, on mature ash trees along old land, NY 991876, 19.viii.1999;
- Catcherside North Plantation, swept beneath mature oak, alder, birch and aspen, NY 995889, 12.viii.1999;
- Gallows Hill Farm, from old hawthorns along Harwood Burn, NZ 028894, 5.viii.1999;
- Newbiggin Farm, swept in a mature ash-oak wood which has been planted up with conifers, NZ 028869, 5.viii.1999;
- Raff Shield, swept in birch alder wood pasture, NZ 004913, 12.viii.1999.
- Fairnley Farm – off alders along Hart Burn, NZ 019880, 19.viii.1999.

It appears to be the commoner of the two in Norfolk (Withers, 1997) and the Lothians (Saville, 1999) but is much less common in Gloucestershire (Alexander, in press) – perhaps it is more frequent in the east of Britain than in the west?

Peripsocus alboguttatus

New (1974) mentions that this is especially found on heaths in southern England. It was found only in an area of sheltered bushy heather at Gallows Hill Wood, NZ 023902, 9.viii.1999; none were found in bushy heather on open moorland elsewhere on the estate. This species has only recently been noted in Scotland (Saville, 1999) and appears to be rare in the north.

Psococerastis gibbosa

Found locally on many kinds of tree, especially in southern and central England. Alexander (*in press*) mentions that in the Cotswolds it is perhaps characteristic of ancient woodlands. Only noted in two woods at Wallington: Newbiggin Farm, swept in a mature ash-oak wood which has been planted up with conifers, NZ 028869, 5.viii.1999; and Rothley Lakes Nature Reserve, swept beneath birches in marshy woodland, NZ 040903, 10.viii.1999. Both of these woods have a few species suggestive of ancient woodland.

Metlyphorus nebulosus

Widespread nationally, but local. Apparently confined in Gloucestershire to the Forest of Dean and a few ancient woodlands in the Cotswolds (Alexander, in press). The two Wallington sites probably include ancient woodland:

- Delf Plantation, swept in oak, ash, hazel woodland, NZ 027889, 9.viii.1999;
- Rothley Lake Reserve, swept in mature oak and ash woodland, NZ 040903, 10.viii.1999.

Trichadenotecnum spp.

These are widespread nationally, but very local and not usually common.

- *Trichadenotecnum fasciatum*: from trunk of dead sycamore in open pasture, Cambo Pasture, NZ 025858, 5.viii.1999.
- *Trichadenotecnum sexpunctatum* and *T. variegatum*: Broom House and Elf Hills, on old ash trees along field boundary between the two farms, NZ 020853, 13.viii.1999.

References

- Alexander, K. N. A., In press. The Bark Flies & Book Lice (Psocoptera) of Gloucestershire. *The Gloucestershire Naturalist* 15.
- Kerslake, L., 1998. Red Data Book for Northumberland, *Trans.Nat.Hist.Soc.Northumb.*, 58 (2).

- Saville, R., 1999. The barklice (Insecta: Psocoptera) of the Lothians (Scotland). *Glasgow Naturalist* **23**: 50-54.
- Smithers, C. N., 1978. A new species and new records of Psocoptera (Insecta) from Ireland. *Ir. Nat. J.*, **19** (5): 141-148.
- Withers, P., 1997. The free-living bark-lice (Insecta; Psocoptera) of Norfolk. *Trans. Norfolk Norwich Nat. Soc.*, **31**: 87-94.

The continuing spread of *Nephus quadrimaculatus* (Herbst) (Col.: Coccinellidae)

Nephus quadrimaculatus has long been considered a rare species in Britain, and was listed by Hyman and Parsons (1992. *A review of the scarce and threatened Coleoptera of Great Britain, Part 1*. UK Nature Conservation, number 3 JNCC) as Vulnerable (Red Data Book category 2). Recent years have seen a marked increase in reports of this ladybird. Traditionally believed to be largely confined to Suffolk (VCs 25 and 26), it was found in West Kent (VC 16) during the 1990s, and Hawkins (2000. *Ladybirds of Surrey*. Surrey Wildlife Trust) describes and maps extensive records for VC 17.

On 12 March 2000, I found a single example among non-flowering ivy growing over old fences and regenerating English elm in the High Street at Trumpington near Cambridge (VC 29). Colston, Gerrard and Parslow (1997 *Cambridgeshire's Red Data Book*. Cambs. Wildlife Trust) indicates that the species has been recorded in the county recently, but gives no further details. At the time of the above capture, I noted that a new supermarket was under construction at the site, and within a few weeks the *N. quadrimaculatus* habitat had been removed as part of these operations. Beating nearby flowering growth of ivy on a subsequent occasion did not yield any further individuals. Near Watford, in the south-west of Hertfordshire (VC 20), beating ivy in the churchyard at Abbots Langley on 2 April 2001 produced two examples. This is the second record for the county, following one at Royston in the north-east in the previous year (A. Halstead per T. James, pers. comm.).

These observations hint at a widespread distribution in and around the above counties of a species which should present little difficulty in identification. The excellent survey by Hawkins (*op. cit.*) includes a colour plate of the insect, but the key in Majerus and Kearns (1989. *Ladybirds*. Richmond Publishing), although accurate in all other particulars, erroneously gives the colour of the (red) elytral spots as yellow, a misconception arising from the examination of faded museum specimens, as acknowledged in Majerus' later monograph (1994. *Ladybirds*. HarperCollins).— C.M. EVERETT, The Lodge, Kytes Drive, Watford, Hertfordshire WD25 9NZ.

***Scryptia fuscula* Müller and *S. testacea* Allen (Col.: Scryptiidae) in Buckinghamshire**

On 20 July 1998, two female *Scryptia* were collected at Ankerwycke, Buckinghamshire (grid reference TQ 002729: these have been determined by Mr A. A. Allen as examples of *S. fuscula* and *S. testacea*. Although the